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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,066	01/31/2002	Robert W. Aukerman	P 1028.11004	2497

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EXAMINER

LIANG, LEONARD S

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 10/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/066,066

Applicant(s)

AUKERMAN, ROBERT W.

Examiner

Leonard S Liang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/01/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-13 is/are rejected.
- 7) ☒ Claim(s) 6 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

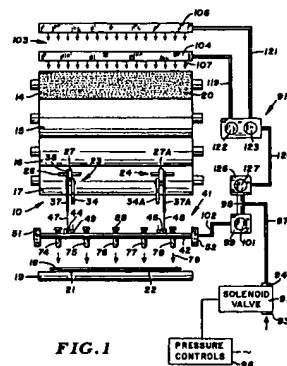
1. Claims 1-5, 7, and 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kolb (US Pat 5791247).

Kolb discloses:

- {claim 1} An ink drying system for high speed printing on a traveling sheet of material, the system being coupled to a source of pressurized gas (figure 1; column 1, line 49-column 3, line 39); a plurality of plenums disposed so as to extend over the sheet, the plenums each including an associated plurality of orifices spaced apart from one another so as to define respective drying portions thereof (figure 1, reference 104, 106); a corresponding plurality of fluid flow valves for controlling fluid communication between the plenums and the source of pressurized gas (figure 1, reference 122, 123); a controller for controlling the flow rate of gas through the valves based on the amount of ink deposited during printing (figure 1, reference 103, 127; column 1, lines 49-67; column 2, lines 36-67; column 3, lines 1-39; inherent)
- {claim 2} the drying portions provide substantially complete laterally extending coverage of the sheet, and wherein the drying portion of at least one of the plenums provides a substantially different range of laterally extending coverage of the sheet than at least one other of the plenums (figure 1, reference 104, 106)
- {claim 3} at least two of the plenums are spaced substantially apart from one another in a direction of travel of the sheet by a predetermined distance, and

wherein the drying portions of the plenums are each substantially laterally co-extensive (figure 1, reference 104, 106)

- {claims 4 and 5} a quantity of the ink is defined by a spatially varying distribution (inherent in order to print different ink images); based on the distribution, selecting one of the plenums to receive more of the pressurized gas than at least some of the other of the plenums (column 2, lines 35-43)
- {claim 7} A method for drying ink in a high speed printing system, the ink being deposited on a traveling sheet of material, the sheet being coupled to a source of pressurized gas (figure 1; column 1, line 49-column 3, line 39); providing a first plenum disposed so as to extend over the sheet (figure 1, reference 106); providing a second plenum disposed so as to extend over the sheet, wherein the plenums each include an associated plurality of orifices spaced apart from one another so as to define respective drying portions thereof (figure 1, reference 104)
- {claim 9} An ink printing and drying system for high speed printing including a print head for depositing ink on a traveling sheet of material, the system being coupled to a source of pressurized gas (figure 1; column 1, line 49-column 3, line 39); a plurality of plenums associated with the print head, the plenums disposed so as to extend over the sheet and each of the plenums including an associated plurality of orifices spaced apart from one another so as to define respective drying portions thereof (figure 1, reference 104, 106); a corresponding plurality of fluid flow valves for controlling fluid communication between the plenums and the source of pressurized gas, one of the plurality of fluid flow valves corresponding to one of the plurality of plenums (figure 1, reference 122, 123); a controller for controlling the valves, the controller being adapted to operate the valves independently of one another such that the flow of gas through the valves is varied in response to information about the printing (figure 1, reference 127; column 2, lines 36-43)



- {claim 10} the drying portions provide substantially complete laterally extending coverage of the sheet, and wherein the drying portion of at least one of the plenums provides a substantially different range of laterally extending coverage of the sheet than at least one other of the plenums (figure 1, reference 104, 106)
- {claim 11} at least two of the plenums are spaced substantially apart from one another in a direction of travel of the sheet by a predetermined distance, and wherein the drying portions of the plenums are each substantially laterally co-extensive (figure 1, reference 104, 106)
- {claims 12 and 13} a quantity of the ink is defined by a spatially varying distribution (inherent in order to print different ink images), and wherein the controller is adapted, based on the distribution, to select one of the plenums to receive more of the pressurized gas than at least some of the other of the plenums (column 2, lines 35-43)

Allowable Subject Matter

2. Claims 6 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 6 and 14 include the limitation “wherein said second amount of the pressurized gas is predetermined based on the first amount, and wherein the difference between the first time and said second time is substantially equal to the distance divided by the speed of travel of the sheet,” which was not found, taught, or suggested in the prior arts.

3. Claim 8 is allowed.

The primary reason for the allowance of claim 8 is the inclusion of the method step of "selecting the other of the two plenums to receive a second predetermined amount of the pressurized gas at a second time, wherein the second amount of the pressurized gas is predetermined based on the first amount, and wherein the difference between the first time and the second time is substantially equal to the distance divided by the speed of travel of the sheet." It is this step found in each of the claims, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

Response to Arguments

4. Applicant's arguments filed 08/01/03 have been fully considered but they are not persuasive.

With reference to Kolb, the applicant argues, "However, the reference does not teach or suggest that the flow of fluid through valves 122 and 123 is varied in response to information about printing. The reference merely states that the valves can be adjusted. According to MPEP 2131, "to anticipate a claim, the reference must teach every element of the claim," and therefore Kolb does not anticipate all the elements of claim 9." Kolb teaches individual control of the valves 122 and 123. However, the question arises as to how the valves are being varied, what controls their variation. Upon closely inspecting the reference of Kolb, it is found that Kolb discloses the purposes of the invention, "Heavy ink coverage on the printed material causes sticking of the printed material to the blankets. This condition is avoided by the operation of the air stripper apparatus (column 1 lines 58-61)...The bars are air emulsifiers in that they discharge streams of air toward the ink on the rollers...Emulsifiers are used with low alcohol content inks and water-based inks to facilitate the setting and drying of the inks (column 3, lines 35-39). It is clear here that Kolb is disclosing the use of controlling air to help strip printed materials bogged down by heavy inks, as well as helping to dry the inks. Thus, since the amount of heavy ink inherently controls the amount of air needed to strip a printed material out of its influence, as well as controls the amount of air needed to properly dry the ink, it is inherent to the invention of

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Kolb that the valves are adjusted based on the amount of ink deposited, even though this feature is not necessarily explicitly disclosed. In the previous rejection, the examiner cited that Kolb did not disclose that a quantity of the ink is defined by a spatially varying distribution, but has now realized that this feature is inherent to the invention of Kolb, since any image that is made from a printing press must necessarily have ink defined by a spatially varying distribution. Thus, in view of the applicant's amendments, the new rejection was made above.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

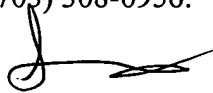
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S Liang whose telephone number is (703) 305-4754. The examiner can normally be reached on 8:30-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (703) 308-4896. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

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Stephen D. Meier
Primary Examiner